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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Noboru Shibuya

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12/17/2008

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ALEXANDRIA, VA 22314

EXAMINER

HENNING, MATTHEW T

ART UNIT

PAPER NUMBER

2431

NOTIFICATION DATE

DELIVERY MODE

12/17/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 09/754,519	<b>Applicant(s)</b> SHIBUYA ET AL.	
	<b>Examiner</b> MATTHEW T. HENNING	<b>Art Unit</b> 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12 and 15-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12 and 15-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 January 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                      |                                                                   |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                          | 6) <input type="checkbox"/> Other: _____                          |

1           This action is in response to the communication filed on 9/15/2008.

2                           **DETAILED ACTION**

3  
4                           *Response to Arguments*

5           Applicant's arguments filed 9/15/2008 have been fully considered but they are not  
6     persuasive.

7           Regarding the applicant's argument that Tatebayashi does not teach or suggest that  
8     “when said external storage card has been cross-authenticated with said general-purpose  
9     computer, said external storage card control mechanism plays copyrighted music data on a  
10    portable music playing device by connecting said external storage card to said portable music  
11    playing device **even if power of said central processing unit is turned off**”, the examiner does  
12    not find the argument persuasive. Again, it is the combination of Tatebayashi and Chan which  
13    has been relied upon in rejecting the claims, and in this case. In the combination, it is audio  
14    subsystem 106 which reads on the "external storage card control mechanism" as claimed. As  
15    pointed out in previous office actions, Tate teaches that when said external storage card has been  
16    cross-authenticated with said general-purpose computer, an external storage card control  
17    mechanism plays copyrighted music data on a portable music playing device by connecting said  
18    external storage card to said portable music playing device (See Tate Col. 8 lines 44-51). Chan  
19    renders obvious that when the CPU is inactive and powered off, the content reproduction should  
20    be controlled by the external storage card control mechanism. As such, in the combination of  
21    Tate and Chan, it is obvious that the content should be reproduced even when the CPU is  
22    powered off. Therefore, the examiner does not find the argument persuasive.

1 Because the arguments have not been found persuasive, the examiner has maintained the  
2 rejections previously presented.

3 Claims 12, and 15-21 have been examined and Claim 1-11, and 13-14 have been  
4 cancelled.

5 All objections and rejections not set forth below have been withdrawn.

6 ***Claim Rejections - 35 USC § 103***

7 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
8 obviousness rejections set forth in this Office action:

9 *A patent may not be obtained though the invention is not identically disclosed or*  
10 *described as set forth in section 102 of this title, if the differences between the subject*  
11 *matter sought to be patented and the prior art are such that the subject matter as a*  
12 *whole would have been obvious at the time the invention was made to a person having*  
13 *ordinary skill in the art to which said subject matter pertains. Patentability shall not be*  
14 *negated by the manner in which the invention was made.*  
15

16 Claims 12, 14-19, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over  
17 Tatebayashi et al. (U.S. Patent Number 6,859,535) hereinafter referred to as Tate, and further in  
18 view of Chan et al. (US Patent Number 6,226,237) hereinafter referred to as Chan.

19 Regarding claim 12, Tate disclosed a general-purpose computer having a central  
20 processing unit which can decode data stored in an internal storage mechanism as instructed by a  
21 program stored in said internal storage mechanism (See Tate Col. 8 Lines 31-51), comprising: a  
22 loading mechanism, which is integrally arranged on a case of said general-purpose computer, for  
23 detachably accommodating an external storage card (See Tate Fig. 2 Elements 501 and 300; note  
24 that Tatebayashi teaches that the memory card reader 400 and the memory card writer 300 can be  
25 one in the same, as can be seen in Tatebayashi Col. 51 Line 64 – Col. 52 Line 11); a decoding

1 mechanism configured to decode data read from said external storage card (See Tate Col. 8 Lines  
2 31-51 and Fig. 6 Element 460); a reproduction mechanism configured to reproduce decoded data  
3 decoded by said decoding mechanism (See Col. 8 Lines 31-51); and said loading mechanism is  
4 configured to read said decoded data based on commands from said central processing unit when  
5 said general-purpose computer is in an active state (See Tate Col. 52 Paragraph 1), and a cross-  
6 authentication mechanism configured to cross-authenticate said external storage card through  
7 said loading mechanism (See Tate Col. 11 Lines 3-20); and a control mechanism for supplying  
8 copyrighted data read from said external storage card to said reproducing mechanism upon  
9 successful cross-authentication by said cross- authentication mechanism (See Col. 8 Lines 44-  
10 51), when said external storage card has been cross-authenticated with said general-purpose  
11 computer, an external storage card control mechanism plays copyrighted music data on a  
12 portable music playing device by connecting said external storage card to said portable music  
13 playing device (See Tate Col. 8 lines 44-51), but failed to disclose a power controller that  
14 supplies power to said general-purpose computer, wherein said power controller supplies power  
15 to said decoding mechanism and said reproduction mechanism even if power of said central  
16 processing unit is turned off, and said loading mechanism is configured to read said decoded data  
17 based on commands from an external storage card control mechanism integrally arranged on said  
18 case of said general-purpose computer, without control of a central processing unit when said  
19 general-purpose computer is in an inactive state, or wherein said power controller supplies power  
20 to said cross-authentication mechanism and said control mechanism even if power of said central  
21 processing unit is turned off and an external storage card control mechanism plays copyrighted

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- 1 music data on a portable music playing device by connecting said external storage card to said
- 2 portable music playing device even if power of said central processing unit is turned off.

1 Chan teaches that when computers reproduce audio from an external device, much of the  
2 power consumed by the computer is in peripherals not actually being used (See Chan Col. 1  
3 Lines 29-37), and that unused portions of the computer, including the CPU, can be powered off  
4 (un-energized), and when the CPU is energized the CPU will control the audio playback  
5 commands, but when the CPU is not energized, an audio sub-system (106) should remain  
6 energized to control the playback of the audio without use of the CPU (See Chan Col. 8  
7 Paragraphs 2-3). Chan further teaches the implementation of such a system utilizes an audio  
8 subsystem (106) which includes a power controller that supplies power to said general-purpose  
9 computer, wherein said power controller supplies power to said decoding mechanism and said  
10 reproduction mechanism even if power of said central processing unit is turned off (See Chan  
11 Col. 8 Paragraphs 2-3: wherein the "computer subsystem 104", which includes the CPU as can  
12 be seen in Fig. 1, is not energized), and said loading mechanism is configured to read audio data  
13 based on commands from an external storage card control mechanism of said general-purpose  
14 computer, without control of a central processing unit when said general-purpose computer is in  
15 an inactive state (See Chan Col. 10 Line 48 – Col. 11 Line 58), or wherein said power controller  
16 supplies power to said cross-authentication mechanism and said control mechanism even if  
17 power of said central processing unit is turned off (See Chan Col. 8 Paragraphs 2-3: wherein the  
18 "computer subsystem 104", which includes the CPU as can be seen in Fig. 1, is not energized).

19 Chan further teaches that the audio sub-system allows the selection and control of musing  
20 being played without powering on the CPU (See Chan Col. 3 Lines 37-40).

1 Chan further teaches that the audio sub-system 106 should have a track number display  
2 and an Icon LCD which the audio subsystem uses to indicate operation (See Chan Col. 6 Lines  
3 52-58).

4 It would have been obvious to the ordinary person skilled in the art at the time of  
5 invention to employ the teachings of Chan within the audio reproduction system of Tate by  
6 incorporating the audio subsystem 106 of Chan within the computer system 500 of Tate in order  
7 to shut off the power to the idle personal computer while reading and reproducing the data from  
8 the external medium by the content player subsystem, or by reading and reproducing the data  
9 from the external medium by the content player subsystem without powering on the CPU, and  
10 having a display configured to display operating characteristics of the audio device when the  
11 computer is idle. This would have been obvious because the ordinary person skilled in the art  
12 would have been motivated to reduce the power consumed by the system. It further would have  
13 been obvious to the ordinary person skilled in the art at the time of invention to have employed  
14 the teachings of Chan by including control buttons in the audio subsystem. This would have  
15 been obvious because the ordinary person skilled in the art would have been motivated to  
16 provide a means for controlling the playback of the audio by the audio subsystem.

17 In this combination it would have been obvious to the ordinary person skilled in the art at  
18 the time of invention that the CD-ROM Drive 138 of Chan would be replaced with the memory  
19 card reader/writer 300 and memory card writer slot 501 of Tatebayashi (which is integrally  
20 arranged on the case of the personal computer 500 as can be seen in Fig. 2 of Tatebayashi)  
21 within the audio subsystem 106. This would have been obvious because the ordinary person



1 skilled in the art would have recognized that the preferred audio system of Tatebayashi was the  
2 memory card reader/writer, and not a CD-ROM drive.

3 In this combination it further would have been obvious to the ordinary person skilled in  
4 the art to have energized the card reader/writer and its components, including the mutual  
5 authentication unit, while the CPU of the personal computer and other components, which as  
6 taught by Chan are not essential to the content reproduction, are not energized. This would have  
7 been obvious because the ordinary person skilled in the art would have been motivated to  
8 conserve energy while allowing for audio reproduction.

9 Regarding claim 15, Tate and Chan disclosed that in an inactive state in which no electric  
10 power is supplied to said general-purpose computer, an external storage card control mechanism  
11 reads copyrighted data from said external storage card and supplies said copyrighted data to a  
12 portable music playing device (See Tate Col. 8 Lines 44-51 and the rejection of claim 12 above).

13 Regarding claim 16, see the rejection of claim 12 above.

14 Regarding claim 17, Tate and Chan disclosed that a function equivalent to a portable  
15 music playing device is realized by executing, by a controller of said general-purpose computer,  
16 a program stored in said internal storage mechanism of said general-purpose computer (See Tate  
17 Col. 1 Lines 29-37 and Col. 8 Lines 31-51 and col. 52 Paragraph 1).

18 Regarding claim 18, Tate and Chan disclosed that said internal storage mechanism is a  
19 hard drive (See Tate Lines 31-34).

20 Regarding claim 19, Tate and Chan disclosed that said copyrighted data is encrypted  
21 copyrighted data (See Tate Abstract).

1           Regarding claim 21, Tate and Chan taught that said external storage card mechanism has  
2   programmable power key functionality (See Chan Col. 11 Lines 55-58).

3  
4           Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination  
5   of Tate and Chan as applied to claim 12 above, and further in view of Schneier (Applied  
6   Cryptography Second Edition).

7           Regarding claim 20, Tate and Chan disclosed that when said external storage card control  
8   mechanism is operated and said central processing unit is in said inactive state, the audio  
9   subsystem enters an initialize state (See Chan Col. 11 Lines 55-58), and in the initialize state, the  
10   audio subsystem causes the audio player to play (See Chan Col. 10 Lines 56-67). However, Tate  
11   and Chan failed to specifically disclose that in this case "a predetermined software program is  
12   executed".

13          Tate did, however, disclosed that in order to reproduce the encrypted content, the  
14   memory card reader and decrypts the encrypted content (See Tate Fig. 8), but Tate is silent as to  
15   whether the decryption process is performed using a software program, or whether it was  
16   performed using only hardware. Tate did disclose that the decryption occurs in the memory card  
17   reader and that the decryption algorithm was pre-stored in the decryption unit (See Tate Col. 10  
18   Lines 23-29 and Col. 16 Lines 49-64 and Col. 14 Lines 14-20).

19          Schneier teaches that any encryption algorithm can be implemented in software, and that  
20   the advantages of doing so are in flexibility and portability, ease of use, and ease of upgrade (See  
21   Schneier Page 225).

It would have been obvious to the ordinary person skilled in the art at the time of invention to have employed the teachings of Schneier in the content reproduction system of Tate and Chan, by implementing the pre-stored decryption algorithm in software. This would have been obvious because the ordinary person skilled in the art would have been motivated to provide the decryption with flexibility and portability, ease of use, and ease of upgrade.

## Conclusion

Claims 12, 14-21 have been rejected.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MATTHEW T. HENNING whose telephone number is (571)272-3790. The examiner can normally be reached on M-F 8-4.

1           If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
2 supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the  
3 organization where this application or proceeding is assigned is 571-273-8300.

4           Information regarding the status of an application may be obtained from the Patent  
5 Application Information Retrieval (PAIR) system. Status information for published applications  
6 may be obtained from either Private PAIR or Public PAIR. Status information for unpublished  
7 applications is available through Private PAIR only. For more information about the PAIR  
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9 system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would  
10 like assistance from a USPTO Customer Service Representative or access to the automated  
11 information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12  
13  
14 /Matthew T Henning/  
15 Examiner, Art Unit 2431

16  
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